

Application No.: 10/696,060  
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REMARKS

*Status of the Application*

Claims 15, 16 and 19 are pending in the application. All claims have been finally rejected. The Examiner has stated that claim 16 would be allowable if written in independent form to include all of the limitations of claim 15.

The following amendments are presented herein:

In the Specification:

The Specification has been amended to indicate that patent application no. 10/027,421 has been issued as US 6,670,645.

In the Claims:

Claim 15 is amended to include the subject matter of Claim 16, and Claim 16 has been canceled. No new matter is introduced.

Claim 19 is amended to state that the device comprises a light-emitting layer and an electron transport layer. Support for this can be found at page 18, lines 14-24. No new matter is introduced.

Claim 20 is added as a new claim and includes the subject matter of Claim 15, as previously presented, with the limitation that L' is an isonitrile only (eliminating phosphine of the formula P(Ar)<sub>3</sub>). No new matter has been introduced.

The above amendments and the remarks set forth below are responsive to the Final Office Action, dated December 20, 2005, entered in the above referenced pending application. The amendments are discussed separately below; the Examiner's rejections are addressed separately below, as well.

*Claim Rejections - 35 U.S.C. § 102*

Claim 15 stands rejected under 35 U.S.C. §102(e) as being anticipated by Igarashi et al., U.S. Patent Application Publication 2002/0048689 ("Igarashi"). Applicants respectfully submit that this rejection has been overcome by the amendments to the claims, relying upon the Examiner's statement that claim 16 would be allowable if written as an independent claim incorporating the limitations of claim 15. This has been accomplished by incorporating previously presented claim 16 into previously presented claim 15 and canceling claim 16.

Claim 15, as amended, recites that the 'L' ligand is selected from tris[3,5-bis(trifluoromethyl)phenyl]phosphine; 2,6-dimethylphenyl isocyanide; 3-trifluoromethylphenyl isocyanide; and 4-toluenesulfonylmethyl isocyanide. None of these ligands is disclosed in *Igarashi*.

Newly added Claim 20 recites that the L' ligand is an isonitrile. There is no disclosure in *Igarashi* of isonitrile ligands.

In view of the proposed amendments, Applicants respectfully submit that claim 15 is not anticipated by *Igarashi*, and request that this rejection be withdrawn.

*Claim Rejections - 35 U.S.C. § 103*

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Tsuboyama*, above, in view of WO 00/70655 ("*Baldo*") and Forrest et al., US 6,894,307 ("*Forrest*").

It is respectfully submitted that currently amended claim 19 is directed to subject matter that would not have been obvious in view of either *Tsuboyama* or *Baldo*, read alone or together, and further in view of *Forrest*. In particular, Claim 19 recites the use of the specifically claimed compounds in an electron transport layer of the organic electronic device and not simply a layer where holes and electrons are combined, such as a light emission layer, where the holes and electrons are combined in the layer resulting in light emissions as suggested by *Tsuboyama* and *Baldo*. There is no teaching or suggestion in *Tsuboyama* or *Baldo*, when read alone or together, of using the iridium complexes in an electron transport layer. Nor is there any suggestion that by combining these references, the results of the present claims could be achieved.

The Examiner has stated that *Forrest* teaches that materials used to produce electroluminescent emission can also be used in an electron transporting layer. Applicants respectfully traverse this characterization of *Forrest*. *Forrest* states, at column 7, lines 29-37:

Because one typically has at least one electron transporting layer and at least one hole transporting layer, one has layers of different materials, forming a heterostructure. The materials that produce the electroluminescent emission may be the same materials that function either as the electron transporting layer or as the hole transporting layer. Such devices in which the electron transporting layer or the hole transporting layer also functions as the emissive layer are referred to as having a single heterostructure.

*Forrest* does not state that all electroluminescent materials may be used as electron or hole transport materials. *Forrest* certainly does not teach that iridium complexes may be used in an electron transport layer. The only teaching with respect to cyclometallated organometallic complexes of iridium is in combination with fluorescent emitters in the emissive layer of a double heterostructure device, in which a separate emissive layer is between the hole transporting layer and the electron transporting layer. (see col. 13, line 40 to col. 14, line 24, and col. 17, line 44 to col. 18, line 44 in *Forrest*). The complexes function as intersystem crossing agents or phosphorescent sensitizers when combined with fluorescent emitters.

The combination of the teaching of *Forrest* with *Tsuboyama* and *Baldo* does not result in a device having separate light-emitting and electron transport layers and having iridium complexes in the electron transport layer, as recited in Applicants' Claim 19.

Applicants respectfully request that this rejection be withdrawn in light of the current amendment and the remarks presented herein.

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Conclusion

In view of the foregoing amendments and remarks, Applicants submit that the above referenced pending application is in condition for allowance. A Notice of Allowance for Claims 15, 19, and 20 is earnestly solicited.

Applicants wish to thank the Examiner for the helpful comments regarding allowable subject matter. Should the Examiner have questions about the content of this paper or the status of the application, the Examiner is invited to call the undersigned at the telephone number listed below.

Applicants believe that no fee, other than that authorized in the accompanying RCE, is required with the submission of this paper. Should a fee, not accounted for herein, be due, then please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

  
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